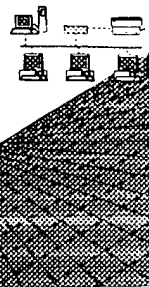


S. Turner

BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following CRF diskette:

Application Serial Number: 09/142,613
Art Unit / Team No. : 1645
Date Processed by STIC: 8/11/99

THE ATTACHED PRINTOUT EXPLAINS THE ERRORS DETECTED.

PLEASE BE SURE TO FORWARD THIS INFORMATION TO THE APPLICANTS BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANTS ALONG WITH A NOTICE TO COMPLY or,

2) CALLING APPLICANTS AND FAXING THEM A COPY OF THE PRINTOUT WITH A NOTICE TO COMPLY

THIS WILL INSURE THAT THE NEXT SUBMISSION RECEIVED FROM THEM WILL BE ERROR FREE.

IF YOU HAVE ANY FURTHER QUESTIONS, PLEASE CALL:

MARK SPENCER 703-308-4212

Raw Sequence Listing Error Summary

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/142,613

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2 Wrapped Aminos The amino acid number/text at the end of each line "wrapped " down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3 Incorrect Line Length The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4 Misaligned Amino Acid The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs
Numbering between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5 Non-ASCII This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6 Variable Length Sequence(s) contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and
indicate in the (ix) feature section that some may be missing.
- 7 PatentIn ver. 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
sequence(s) . Normally, PatentIn would automatically generate this section from the
previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section
to the subsequent amino acid sequence.
- 8 Skipped Sequences Sequence(s) missing. If intentional, please use the following format for each skipped sequence:
(OLD RULES) (2) INFORMATION FOR SEQ ID NO:X:
 (i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
 This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9 Skipped Sequences Sequence(s) missing. If intentional, please use the following format for each skipped sequence.
(NEW RULES) <210> sequence id number
 <400> sequence id number
 000
- 10 Use of n's or Xaa's Use of n's and/or Xaa's have been detected in the Sequence Listing.
(NEW RULES) Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11 Use of <213>Organism Sequence(s) are missing this mandatory field or its response.
(NEW RULES)
- 12 Use of <220>Feature Sequence(s) are missing the <220>Feature and associated headings.
(NEW RULES) Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13 PatentIn ver. 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted
file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.
AKS-Biotechnology Systems Branch- 5/15/99

STurner

1645

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/142,613DATE: 08/11/1999
TIME: 15:42:12

Input Set: I142613.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

Does Not Comply
Corrected Diskette Needed

see
PP. 5, 3

<110> APPLICANT: ISHIGURO, Koichi
SATO, Kazuki
PARK, Jun-Mi
UCHIDA, Tsuneko
IMAHORI, Kazutomo
<120> TITLE OF INVENTION: ANTI-PHOSPHORYLATED TAU PROTEIN ANTIBODIES AND METHODS
FOR DETECTING ALZHEIMER'S DISEASE WITH THE USE OF THE
SAME
<130> FILE REFERENCE: 98-0997*/LC(WMC)/1416
<140> CURRENT APPLICATION NUMBER: US/09/142,613
<141> CURRENT FILING DATE: 1999-04-19
<160> NUMBER OF SEQ ID NOS: 22
<170> SOFTWARE: PatentIn Ver. 2.0
<210> SEQ ID NO 1
<211> LENGTH: 441
<212> TYPE: PRT
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 1
Met Ala Glu Pro Arg Gln Glu Phe Glu Val Met Glu Asp His Ala Gly
1 5 10 15
Gln Asp Thr Tyr Gly Leu Gly Asp Arg Lys Asp Gln Gly Gly Tyr Thr
20 25 30
Met His Gln Glu Gly Asp Thr Asp Ala Gly Leu Lys Glu Ser Pro Leu
35 40 45
Gln Thr Pro Thr Glu Asp Gly Ser Glu Glu Pro Gly Ser Glu Thr Ser
50 55 60
Asp Ala Lys Ser Thr Pro Thr Ala Glu Asp Val Thr Ala Pro Leu Val
65 70 75 80
Asp Glu Gly Ala Pro Gly Lys Gln Ala Ala Ala Gln Pro His Thr Glu
85 90 95
Ile Pro Glu Gly Thr Thr Ala Glu Glu Ala Gly Ile Gly Asp Thr Pro
100 105 110
Ser Leu Glu Asp Glu Ala Ala Gly His Val Thr Gln Ala Arg Met Val
115 120 125
Ser Lys Ser Lys Asp Gly Thr Gly Ser Asp Asp Lys Lys Ala Lys Gly
130 135 140
Ala Asp Gly Lys Thr Lys Ile Ala Thr Pro Arg Gly Ala Ala Pro Pro
145 150 155 160
Gly Gln Lys Gly Gln Ala Asn Ala Thr Arg Ile Pro Ala Lys Thr Pro
165 170 175
Pro Ala Pro Lys Thr Pro Pro Ser Ser Gly Glu Pro Pro Lys Ser Gly
180 185 190
Asp Arg Ser Gly Tyr Ser Ser Pro Gly Ser Pro Gly Thr Pro Gly Ser
195 200 205

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RAW SEQUENCE LISTING PATENT APPLICATION US/09/142,613

DATE: 08/11/1999
TIME: 15:42:12

Input Set: I142613.RAW

```

45      Arg Ser Arg Thr Pro Ser Leu Pro Thr Pro Pro Thr Arg Glu Pro Lys
46          210                      215                      220
47      Lys Val Ala Val Val Arg Thr Pro Pro Lys Ser Pro Ser Ser Ala Lys
48      225                      230                      235                      240
49      Ser Arg Leu Gln Thr Ala Pro Val Pro Met Pro Asp Leu Lys Asn Val
50                      245                      250                      255
51      Lys Ser Lys Ile Gly Ser Thr Glu Asn Leu Lys His Gln Pro Gly Gly
52                      260                      265                      270
53      Gly Lys Val Gln Ile Ile Asn Lys Lys Leu Asp Leu Ser Asn Val Gln
54          275                      280                      285
55      Ser Lys Cys Gly Ser Lys Asp Asn Ile Lys His Val Pro Gly Gly Gly
56          290                      295                      300
57      Ser Val Gln Ile Val Tyr Lys Pro Val Asp Leu Ser Lys Val Thr Ser
58      305                      310                      315                      320
59      Lys Cys Gly Ser Leu Gly Asn Ile His His Lys Pro Gly Gly Gly Gln
60                      325                      330                      335
61      Val Glu Val Lys Ser Glu Lys Leu Asp Phe Lys Asp Arg Val Gln Ser
62          340                      345                      350
63      Lys Ile Gly Ser Leu Asp Asn Ile Thr His Val Pro Gly Gly Gly Asn
64          355                      360                      365
65      Lys Lys Ile Glu Thr His Lys Leu Thr Phe Arg Glu Asn Ala Lys Ala
66          370                      375                      380
67      Lys Thr Asp His Gly Ala Glu Ile Val Tyr Lys Ser Pro Val Val Ser
68      385                      390                      395                      400
69      Gly Asp Thr Ser Pro Arg His Leu Ser Asn Val Ser Ser Thr Gly Ser
70                      405                      410                      415
71      Ile Asp Met Val Asp Ser Pro Gln Leu Ala Thr Leu Ala Asp Glu Val
72          420                      425                      430
73      Ser Ala Ser Leu Ala Lys Gln Gly Leu
74          435                      440

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75 <210> SEQ ID NO 2

76 <211> LENGTH: 12

77 <212> TYPE: PRT

78 <213> ORGANISM: Artificial Sequence

79 <220> FEATURE:

80 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial
81 peptide of Tau protein

82 <220> FEATURE:

83 <221> NAME/KEY: PHOSPHORYLATION

84 <222> LOCATION: (6)

85 <223> OTHER INFORMATION: Xaa=phosphoserine

86 <400> SEQUENCE: 2

W--> 87 Lys Ser Gly Tyr Ser Xaa Pro Gly Ser Pro Gly Thr
88 1 5 10

89 <210> SEQ ID NO 3

90 <211> LENGTH: 13

91 <212> TYPE: PRT

92 <213> ORGANISM: Artificial Sequence

93 <220> FEATURE:

94 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/142,613

DATE: 08/11/1999
TIME: 15:42:12

Input Set: I142613.RAW

95 peptide of Tau protein
96 <220> FEATURE:
97 <221> NAME/KEY: PHOSPHORYLATION
98 <222> LOCATION: (6)
99 <223> OTHER INFORMATION: Xaa=phosphoserine
100 <400> SEQUENCE: 3
W--> 101 Lys Ser Ser Pro Gly Xaa Pro Gly Thr Pro Gly Ser Arg
102 1 5 10
103 <210> SEQ ID NO 4
104 <211> LENGTH: 12
105 <212> TYPE: PRT
106 <213> ORGANISM: Artificial Sequence
107 <220> FEATURE:
108 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial
109 peptide of Tau protein
110 <220> FEATURE:
111 <221> NAME/KEY: PHOSPHORYLATION
112 <222> LOCATION: (7)
113 <223> OTHER INFORMATION: Xaa=phosphothreonine
114 <400> SEQUENCE: 4
W--> 115 Cys Pro Gly Ser Pro Gly Xaa Pro Gly Ser Arg Ser
116 1 5 10
117 <210> SEQ ID NO 5
118 <211> LENGTH: 13
119 <212> TYPE: PRT
120 <213> ORGANISM: Artificial Sequence
121 <220> FEATURE:
122 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial
123 peptide of Tau protein
124 <220> FEATURE:
125 <221> NAME/KEY: PHOSPHORYLATION
126 <222> LOCATION: (6)
127 <223> OTHER INFORMATION: Xaa=phosphoserine *what about Xaa at location 3?*
128 <400> SEQUENCE: 5 *see item 10 in Eva summary sheet*
W--> 129 Lys Ser Xaa Pro Gly Xaa Pro Gly Thr Pro Gly Ser Arg
130 1 5 10
131 <210> SEQ ID NO 6
132 <211> LENGTH: 14
133 <212> TYPE: PRT
134 <213> ORGANISM: Artificial Sequence
135 <220> FEATURE:
136 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial
137 peptide of Tau protein
138 <220> FEATURE:
139 <221> NAME/KEY: PHOSPHORYLATION
140 <222> LOCATION: (7)
141 <223> OTHER INFORMATION: Xaa=phosphothreonine
142 <400> SEQUENCE: 6
W--> 143 Cys Val Ala Val Val Arg Xaa Pro Pro Lys Ser Pro Ser Ser
144 1 5 10

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/142,613

DATE: 08/11/1999

TIME: 15:42:12

Input Set: I142613.RAW

145 <210> SEQ ID NO 7
146 <211> LENGTH: 12
147 <212> TYPE: PRT
148 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
150 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial
151 peptide of Tau protein
152 <220> FEATURE:
153 <221> NAME/KEY: PHOSPHORYLATION
154 <222> LOCATION: (7)
155 <223> OTHER INFORMATION: Xaa=phosphoserine
156 <400> SEQUENCE: 7
W--> 157 Cys Arg Thr Pro Pro Lys Xaa Pro Ser Ser Ala Lys
158 1 5 10
159 <210> SEQ ID NO 8
160 <211> LENGTH: 12
161 <212> TYPE: PRT
162 <213> ORGANISM: Artificial Sequence
163 <220> FEATURE:
164 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial
165 peptide of Tau protein
166 <220> FEATURE:
167 <221> NAME/KEY: PHOSPHORYLATION
168 <222> LOCATION: (7)
169 <223> OTHER INFORMATION: Xaa=phosphoserine
170 <400> SEQUENCE: 8
W--> 171 Cys Arg Thr Pro Pro Lys Xaa Pro Ser Ala Ser Lys
172 1 5 10
173 <210> SEQ ID NO 9
174 <211> LENGTH: 12
175 <212> TYPE: PRT
176 <213> ORGANISM: Artificial Sequence
177 <220> FEATURE:
178 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial
179 peptide of Tau protein
180 <220> FEATURE:
181 <221> NAME/KEY: PHOSPHORYLATION
182 <222> LOCATION: (3)
183 <223> OTHER INFORMATION: Xaa=phosphothreonine
184 <220> FEATURE:
185 <221> NAME/KEY: PHOSPHORYLATION
186 <222> LOCATION: (7)
187 <223> OTHER INFORMATION: Xaa=phosphoserine
188 <400> SEQUENCE: 9
W--> 189 Cys Arg Xaa Pro Pro Lys Xaa Pro Ser Ser Ala Lys
190 1 5 10
191 <210> SEQ ID NO 10
192 <211> LENGTH: 12
193 <212> TYPE: PRT
194 <213> ORGANISM: Artificial Sequence

PAGE: 5

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/142,613

DATE: 08/11/1999

TIME: 15:42:12

Input Set: I142613.RAW

195 <220> FEATURE:
196 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial
197 peptide of Tau protein
198 <220> FEATURE:
199 <221> NAME/KEY: PHOSPHORYLATION
200 <222> LOCATION: (7)
201 <223> OTHER INFORMATION: Xaa=phosphoserine
202 <400> SEQUENCE: 10
W-- 203 Cys Lys Ser Lys Ile Gly Xaa Thr Glu Asn Leu Lys
204 1 5 10
205 <210> SEQ ID NO 11
206 <211> LENGTH: 12
207 <212> TYPE: PRT
208 <213> ORGANISM: Artificial Sequence
209 <220> FEATURE:
210 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial
211 peptide of Tau protein
212 <220> FEATURE:
213 <221> NAME/KEY: PHOSPHORYLATION
214 <222> LOCATION: (7)
215 <223> OTHER INFORMATION: Xaa=phosphoserine
216 <400> SEQUENCE: 11
W-- 217 Cys Glu Ile Val Tyr Lys Xaa Pro Val Val Ser Gly
218 1 5 10
219 <210> SEQ ID NO 12
220 <211> LENGTH: 12
221 <212> TYPE: PRT
222 <213> ORGANISM: Artificial Sequence
223 <220> FEATURE:
224 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial
225 peptide of Tau protein
226 <220> FEATURE:
227 <221> NAME/KEY: PHOSPHORYLATION
228 <222> LOCATION: (7)
229 <223> OTHER INFORMATION: Xaa=phosphoserine
230 <400> SEQUENCE: 12
W-- 231 Cys Val Ser Gly Asp Thr Xaa Pro Arg His Leu Ser
232 1 5 10
233 <210> SEQ ID NO 13
234 <211> LENGTH: 12
235 <212> TYPE: PRT
236 <213> ORGANISM: Artificial Sequence
237 <220> FEATURE:
238 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial
239 peptide of Tau protein
240 <220> FEATURE:
241 <221> NAME/KEY: PHOSPHORYLATION
242 <222> LOCATION: (7)
243 <223> OTHER INFORMATION: Xaa=phosphoserine
244 <400> SEQUENCE: 13

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

FYI

Input Set: I142613.RAW

Line	?	Error/Warning	Original Text
87	W	"N" or "Xaa" used: Feature required	Lys Ser Gly Tyr Ser Xaa Pro Gly Ser Pro G
101	W	"N" or "Xaa" used: Feature required	Lys Ser Ser Pro Gly Xaa Pro Gly Thr Pro G
115	W	"N" or "Xaa" used: Feature required	Cys Pro Gly Ser Pro Gly Xaa Pro Gly Ser A
129	W	"N" or "Xaa" used: Feature required	Lys Ser Xaa Pro Gly Xaa Pro Gly Thr Pro G
143	W	"N" or "Xaa" used: Feature required	Cys Val Ala Val Val Arg Xaa Pro Pro Lys S
157	W	"N" or "Xaa" used: Feature required	Cys Arg Thr Pro Pro Lys Xaa Pro Ser Ser A
171	W	"N" or "Xaa" used: Feature required	Cys Arg Thr Pro Pro Lys Xaa Pro Ser Ala S
189	W	"N" or "Xaa" used: Feature required	Cys Arg Xaa Pro Pro Lys Xaa Pro Ser Ser A
203	W	"N" or "Xaa" used: Feature required	Cys Lys Ser Lys Ile Gly Xaa Thr Glu Asn L
217	W	"N" or "Xaa" used: Feature required	Cys Glu Ile Val Tyr Lys Xaa Pro Val Val S
231	W	"N" or "Xaa" used: Feature required	Cys Val Ser Gly Asp Thr Xaa Pro Arg His L
245	W	"N" or "Xaa" used: Feature required	Lys Leu Ser Asn Val Ser Xaa Thr Gly Ser I
259	W	"N" or "Xaa" used: Feature required	Cys Ile Asp Met Val Asp Xaa Pro Gln Leu A
273	W	"N" or "Xaa" used: Feature required	Lys Leu Ser Asn Val Xaa Ser Thr Gly Ser I
291	W	"N" or "Xaa" used: Feature required	Lys Leu Ser Asn Val Xaa Xaa Thr Gly Ser I